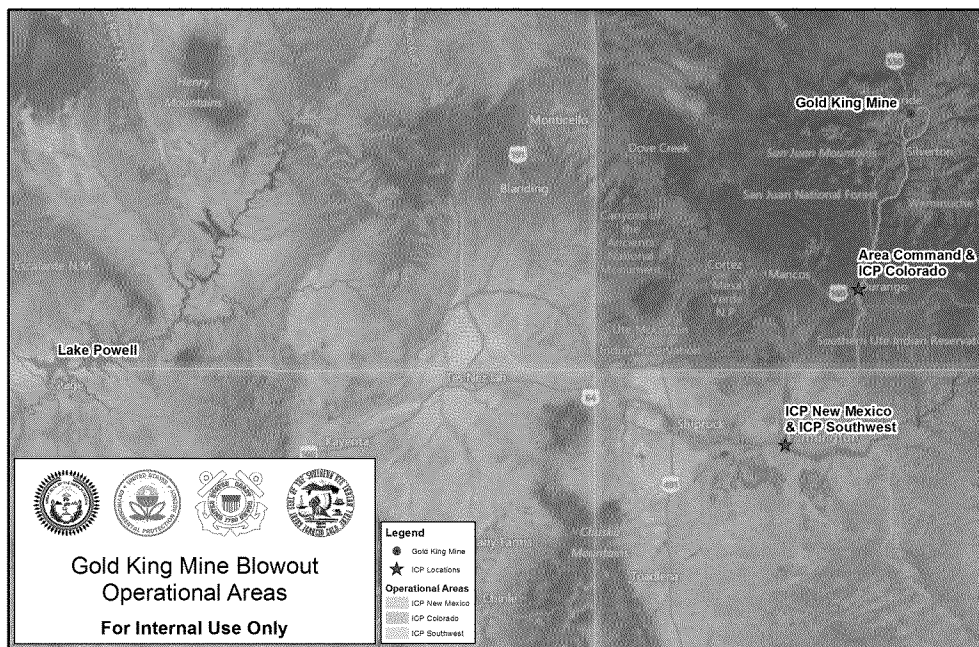


U.S. ENVIRONMENTAL PROTECTION AGENCY
AREA COMMAND EXECUTIVE SUMMARY / SITUATION REPORT
2015 Gold King Mine Release



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Area Command (EPA Regions 8, 6, and 9)



EXECSUM / SITREP #3
Gold King Mine Release

Subject:

San Juan County, Colorado
Latitude: 37.8945 Longitude: -107.6384

From: Area Command Situation Unit

Date: 08/14/2015

Reporting Period: 08/13/15 0700 through 08/14/15 0700

Website: www2.epa.gov/goldkingmine

Executive Summary

For Internal Use Only
Gold King Mine Release
EPA Executive Summary: August 14, 2015 1900

Situation Summary

EPA Area Command (AC), comprised of EPA Regions 6, 8, and 9 is continuing strategic management over the three Unified Incident Command Posts.

Highlights, Key Updates/ Changes

- EPA posted New Mexico surface water sample data for August 7th and 8th, 2015.
- The La Plata County, Colorado Sheriff opened the Animas River within the county boundaries to recreational use. (Press release attached).
- New Mexico lifted the ban on the use of private domestic water wells previously closed.

Area Command Emphasis

For the next operational period, the AC command's emphasis will be:

- To develop a wider message that river conditions are returning to normal in the Region 8 portion of the response area. This will include the development of Question and Answer sheets and fact sheets.
- To prepare for visits scheduled next week by Congressional members and OSWER Headquarters personnel.
- To develop a plan to consolidate data from the various call centers and establish a central database for this call data.
- To minimize fatigue of response and IMT personnel and to provide CISM.
- To conduct safety risk management and mitigation practices.

Note: The metrics provided in this SITREP represent quantities reported in the EPA Region 6, 8, and 9 SITREPs for work completed on Thursday, August 13, 2015.

1.0 Operations

1.1 Sampling Operations

Operations sampling activities for August 13, 2015 are summarized below.

Table 1 – Operation Sampling Activities (August 13, 2015)

Matrix	Region	August 13, 2015
Private Drinking Water Wells	Region 6	42
	Region 8	19
	Region 9	0
Surface Water Samples	Region 6	9
	Region 8	4
	Region 9	7
Sediment Samples	Region 6	39
	Region 8	12
	Region 9	7

Note: NR- No samples reported.

1.2 Water Distribution and Transportation Branch

Area Command continues to monitor potable water, agricultural water, and agricultural food deliveries. These activities are summarized below.

Table 2 – Public Support Summary

Activity	Region	August 13, 2015		Cumulative	
		Items	Quantity	Items	Quantity
Potable Water Deliveries	Region 6	NR	NR	NR	NR
	Region 8	0	0	9	58,200
	Region 9	0*	0*	0*	0*
Livestock / Agricultural Water Deliveries	Region 6	9	298,863	21	532,623
	Region 8	1	15,430	31	91,020
	Region 9	2	28,000	2	28,000
Agricultural Food Deliveries	Region 6	NR	NR	NR	NR
	Region 8	NR	NR	NR	NR
	Region 9	0	0	0	0

Notes: NR- No deliveries reported.

*Water deliveries in Region 9 are being handled by the Navajo Tribal Utility Authority.

1.3 Community Engagements

Community engagements reported for August 12, 2014 are presented below:

Table 3 - Community Engagement Summary

August 13, 2014		
Community Engagements	Region 6	2
	Region 8	1
	Region 9	1

1.4 Community Relations Branch

EPA Region 6- On August 13, 2015 the toll-free call-in number received 42 inquiries. Of those twenty-three calls dealt directly with Region 6.

EPA Region 8- As of 5:00 pm on August 13, 2015, their regional call center (970-385-8700) had received 659 calls. The EPA 800 Number has received 14 calls for Colorado.

EPA Region 9 - EPA staff in Region 9 have completed a draft of text to be included in a factsheet encompassing EPA R9's response activities along the San Juan River.

2.0 Drinking Water System Impacts

Drinking water systems affected by the response as of August 13, 2015, and their status are summarized below:

Table 4 – Public Support Summary

Region	Number of Affected Water Systems	Population	Status
Region 6	8	80,392	All systems currently in operation.
Region 8	0	0	All systems currently in operation.
Region 9	0	0	All systems currently in operation.

3.0 Finance

Financial tracking for the response as of August 14, 2015 is summarized below:

Table 5 – Estimated Response Costs Reported as of August 14, 2015

Item	Cost
EPA Region 6 Payroll Costs	\$207,060
EPA Region 6 Travel Costs	\$28,750
EPA Region 6 Contracts	\$705,200
EPA Region 8 Payroll Costs	\$124,169
EPA Region 8 Travel Costs	\$55,399
EPA Region 8 Contracts	\$545,275
EPA Region 9 Payroll Costs	\$100,800
EPA Region 9 Travel Costs	\$26,250
EPA Region 9 Contracts	Not Reported
Other Costs	\$67,000
Total Estimated Response Costs to Date	\$1,859,903

4.0 Participating Entities

Region 6

US EPA
USFWS
NMED
ATSDR
NM Department of Health
NM Office of the State Engineer
NM Department of Game and Fish
County of San Juan – New Mexico

Region 8

US EPA
USFWS
US Coast Guard
ERT

Colorado OEM
 Southern Ute Tribe
 La Plata County
 San Juan County
 Colorado Department of Public Health and Environment (CDPHE)
 Southwest IMT
 City of Durango
 Durango Fire Department
 San Juan County Health Department

Region 9

US EPA
 US Coast Guard
 Navajo Nation

5.0 Personnel On-Site

Staffing numbers for the federal entities and agencies active in the response are presented in Table 5.

Table 6 - Personnel On-Site

Region	Agency / Entity	Number of Personnel
Area Command	U.S. EPA	17
	US. EPA Contractors	2
	U.S. Coast Guard	4
EPA Region 6	U.S. EPA Region 6	46
	US. EPA Region 6 Contractors	33
	U.S. Coast Guard	2
EPA Region 8	U.S. EPA Region 8	58
	US. EPA Region 8 Contractors	33
	U.S. Coast Guard	2
EPA Region 9	U.S. EPA Region 9	10
	US. EPA Region 9 Contractors	10
	U.S. Coast Guard	6
	Total	223

6.0 Source of Additional Information

For additional information, refer to www2.epa.gov/goldkingmine

EPA Statement on New Mexico Reopening Private Domestic Water Well Use

Today, New Mexico announced its determination that private domestic water well use along the Animas River should resume based on water quality sampling results collected by both New Mexico Environment Department and the EPA.

Reopening private domestic water well use is a state and local decision and we believe they have taken appropriate steps in arriving at this this decision. EPA sampling results from the river collected last week similarly show that water quality conditions are returning toward pre-event conditions.

We know the state has gone through a deliberative process in making this decision. EPA will continue to sample, analyze, and make data available to support local decision makers moving forward to allow them to make the best informed decisions.



FOR IMMEDIATE RELEASE

For additional information:

Please contact the Joint Information Center at 970-812-3351

August 14, 2015

12:00 p.m.

Update on Local Response to Gold King Mine and Animas River Impacts - Sheriff Smith Opens Recreation on the River in La Plata County

Durango, CO – The Colorado Department of Public Health and Environment has collected and analyzed sediment from the Animas River. The data show levels of contamination are below what would be a concern for human health during typical recreational exposure.

Based on this statement from the state health department, Sheriff Sean Smith has made the decision to open the river to recreational use with the attached health advisory from the state health department. Sheriff Smith said, “My primary concern is the public health and safety of our community. In an abundance of caution, with the consultation of all our partner agencies, I issued the order to close the river to recreational uses on Thursday, August 6. With the release of preliminary results from the state health department and its accompanying recommendation, I am opening our river for recreation effective Friday, August 14, 2015 at noon with the health advisory.”

Sediment is just one indicator of a healthy river, and there is some level of contamination in most Colorado rivers because of past mining activities and the geology of the state. The Colorado Department of Public Health and Environment does not anticipate adverse health effects from exposure to contaminants detected in the water and sediment during typical recreational activities. The Agency for Toxic Substances and Disease Registry recommends the following recommendations are prudent public health practices regarding contact with sediments and surface water:

1. Don't drink untreated water from the river
2. Wash hands thoroughly with soap and water after contact with the sediment and surface water.
3. Avoid contact in areas where there is visible discoloration in sediment or river water.
4. Wash clothes after contact with sediments and surface water.

In addition, the EPA sediment samples collected in the Animas River from Baker's Bridge to north of Durango have been analyzed but not yet validated. EPA has done a preliminary review of the data which included a comparison to background to determine if the metal concentrations are consistent with pre-

incident levels. Metal results that exceeded pre-incident levels were subsequently compared to risk-based screening levels. These preliminary results indicate that minor exceedances of background concentrations were observed for antimony, lead, silver, thallium. However, comparison to risk-based screening values found these exceedances to be below risk screening levels.

The review and interpretation of these data was a collaborative effort that included state and local members of the unified command. Once EPA sediment data is validated, it will be posted online at:
<http://www2.epa.gov/goldkingmine>

While conditions in the Animas River today have been determined safe for recreational use, irrigation ditches that draw from the river currently are being flushed, and agricultural users should continue to exercise patience until this process is complete.

La Plata County has flushed and allowed use of some irrigation ditches for watering crops such as wheat and alfalfa. The county is systematically working to reopen all ditches. Operators of ditches that use water from the Animas River are asked to call the La Plata County Call Center at 970-385-8700 so officials can coordinate reopening of all river head gates. Flushing may cause local, temporary discoloration of the Animas River, which should clear quickly.

Gardeners who use water from the Animas River and grow leafy vegetables and root crops should call the CSU Extension office at 970-382-6463. Answers to questions are site and crop specific.

The Colorado Department of Agriculture State Veterinarian's Office is confident that water from the Animas River can be used to water livestock. "The information we have received shows that water quality levels are comparable to those prior to the spill," said Dr. Carl Heckendorf, State Veterinarian for the Colorado Department of Agriculture. "We will continue to monitor the situation and will provide updates if it becomes necessary."

Local, tribal, state and federal agencies will continue to test water and sediment routinely and will respond quickly to any potential issues.

Incident information is posted to the La Plata County website at <http://www.co.laplata.co.us/emergency>, San Juan Basin Health Department's Website at www.sjbhd.org, on Facebook at www.facebook.com/LaPlataCounty, and <http://www.facebook.com/sanjuanbasinhealth>. Data is posted to Colorado Department of Public Health and Environment website at <https://www.colorado.gov/pacific/cdphe/animas-river-spill>, at EPA's website at <http://www2.epa.gov/goldkingmine>. La Plata County has set up a call center for questions from citizens at 970-385-8700, open from 8:00 a.m. to 6:00 p.m. Southern Ute Tribal members may call the Tribal Hotline at 970-563-5025.

###

ORDER OF THE LA PLATA COUNTY COLORADO SHERIFF
TERMINATING THE USE RESTRICTIONS ON THE ANIMAS RIVER
AUGUST 14, 2015

Pursuant to the authority vested in me under C.R.S. §§ 33-13-111 and 112, I, Sean Smith, Sheriff of La Plata County, Colorado, hereby issue this Order dated August 14, 2015.

I. Background

A. On August 5, 2015, the EPA and State Division of Reclamation, Mining and Safety team working to investigate and address contamination at the Gold King Mine in San Juan County, Colorado unexpectedly triggered a large release of mine waste water into the upper portions of Cement Creek located in San Juan County, Colorado. Revised estimates are that the release contained approximately 3 million gallons of water that was held behind unconsolidated debris near an abandoned mine portal.

B. The EPA recommended that recreational users of the Animas River avoid contact with or use of the river until the pulse of mine water passed.

C. After consultation with the EPA, Colorado Department of Public Health and Environment and San Juan Basin Health Department, I determined that a hazard to human life and safety existed within La Plata County and on August 6, 2015 issued an order imposing use restrictions on the Animas River.

D. The San Juan Basin Health Department and the Colorado Department of Public Health and Environment have determined and advised me that it is safe to reopen the river to recreational use, subject to the attached list of advisements.

D. Based upon sampling data that has now been produced and in consultation with local, state and federal officials, I have determined that the threat to human life and safety has passed and that it is appropriate to terminate the restrictions put in place on August 6, 2015, subject to the attached advisements.

II. Directive

As of August 14, 2015 at 12:01 p.m., the official use restrictions put in place on August 6, 2015 shall be lifted and recreational activities on the entirety of the Animas River located within the jurisdiction of La Plata County may be fully restored, subject to the attached health advisements.


Sean M. Smith, La Plata County Sheriff



Animas River Health Advisory

The Colorado Department of Public Health and Environment has collected and analyzed water quality and sediment from the Animas River. The data indicates that the river has returned to stable conditions that are not a concern for human health during typical recreational exposure. There will be some discoloration of the water when the sediment is disturbed, this discoloration does not pose an immediate health risk.

The San Juan Basin Health Department concurs with the state health department findings, and advises that there are no adverse health effects from exposure to the water and sediment during normal recreational use (incidental or limited exposure). The San Juan Basin Health Department advises the public to avoid areas with orange sediment or discolored standing water. Further, anyone coming in contact with any orange sediment or discolored standing water should wash with soap and water.

The Colorado Department of Public Health and Environment will continue to test water and sediment routinely and will respond quickly to any potential issues. Visit the [state health department website](#) for data and updates. The San Juan Basin Health Department will remain in contact with state health department and will provide any updates and public health recommendations as necessary.



EFFECTIVE FRIDAY, AUGUST 14, 2015 at 12:00 PM

San Juan Basin Health

281 Sawyer Drive #200

Durango, Colorado 81303

970-247-5702

**U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Gold King Mine Spill - Region 6**



EPA Administrator speaking at press conference in Farmington, New Mexico

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VI**

**Subject: POLREP #7
Gold King Mine Spill - Region 6**

**Various New Mexico locations, NM
Latitude: 36.8374600 Longitude: -107.9916800**

From: Ronnie Crossland, Region 6 Regional Incident Commander (RIC)

Date: 8/14/2015

Reporting Period: 8/13/2015 0700 – 8/13/2015 1900

1. Introduction

1.1 Description of Threat

Region 8 reported approximately three million gallons of mine waste water was released into Cement Creek and the Animas River. The primary environmental concern is the pulse of contaminated water containing sediment and metals flowing as an orange-colored discharge downstream through Durango, Colorado, and into New Mexico and Utah.

1.2 Preliminary Removal Assessment/Removal Site Inspection Results

Water monitoring and sampling is ongoing at public water supply intakes and private wells and field pH levels and other water quality parameters are being monitored.

2. Current Activities

Headquarters has established a joint website at www.epa.gov/goldkingmine.

Created a new general public call-in number for Regions 6, 8, and 9: 844 – 607 – 9700.

2.1 Operations Section

Validated surface water data from August 8 and 9, 2015, pre and post slug surface water samples has been posted to the Gold King Mine website. The results can be viewed at <http://www2.epa.gov/goldkingmine/gold-king-mine-data-august-13-2015>.

On August 13, 2015, NMED announced that they are considering removing advisories restricting water use in stages. Before NMED lifts the advisories, they would like see at least one more days' worth of validated data. NMED's initial target for lifting advisories is drinking water wells, followed by intakes, then recreational activities, and finally irrigation ditches.

On August 13, 2015, the toll-free call-in number received forty-two inquiries, of those twenty-three dealt directly with Region 6. Regions 6, 8 and 9 will coordinate responses to these calls.

The R6 Incident Command in Farmington received the community outreach package and will distribute copies at the San Juan County Fair, residences where private wells are sampled, and at community meetings.

An ATSDR representative and New Mexico Department of Health Poison Control Center representative were present at the August 13, 2015, evening community meeting to answer questions related to health concerns.

Private Drinking Water Well Sampling

EPA collected forty-two samples from private drinking water well locations on August 13, 2015.

The R6 EPA Incident Command and NMED Drinking Water Bureau focused efforts on getting water to the Town of Morningstar because their water supply is at critical levels. The Town reported only three to five days of supply remaining.

EPA received comments from NMED regarding the draft Sampling Plan and EPA will evaluate NMED's comments for inclusion in the final version.

On August 13, 2015, EPA received validated data for private drinking water well samples that were taken on August 10, 2015, and preliminary data for private drinking water well samples that were taken on August 11, 2015.

EPA is modeling the groundwater hydrology of the private wells.

Irrigation Ditch Sediment Sampling

EPA collected twenty-nine irrigation ditch sediment samples today. Three of the twenty-nine samples were from critical locations and were couriered to the lab in Albuquerque. The courier was escorted by law enforcement to the laboratory to expedite sample receipt. EPA will receive preliminary data for these three priority samples on August 14, 2015. EPA will receive preliminary data on the remaining twenty-six samples on August 15, 2015.

Surface Water and Sediment Sampling

EPA collected nine surface water and sediment samples on August 13, 2015.

EPA received validated data on August 13, 2015, for sediment samples that were taken on August 10, 2015, validated data for surface water samples that were taken on August 9 and 10, 2015, and preliminary data for surface water and sediment samples taken on August 11, 2015.

Agriculture and Livestock Water

On August 13, 2015, EPA made deliveries to 6 agriculture and 3 livestock locations, totaling 298,683 gallons. Since August 11, 2015, EPA has made deliveries to 13 agriculture and 8 livestock locations, totaling 532,623 gallons. The limiting factor is the number of available trucks. We estimate 13 available trucks by the end of the week. San Juan County is coordinating loading points and logistics for staging and scheduling the trucks.

Drinking Water Systems Update

Based on conversation with the State of New Mexico and drinking water systems on August 12, 2015, the following is the list of affected water systems and their status:

System Name	Population	# Days Water Available
Aztec Domestic Water System	6800	10 days
Farmington Water System	47000	60 days
Lower Valley WUA	8428	6 days
Morningstar Water Supply System	6423	3-5 days *
Northstar WDWCA	4123	30 days
Southside Mutual Domestic	1593	3 - 5 days/get water from Aztec
Upper La Plata WUA	2265	Get water from Aztec and Farmington
Flora Vista	4300	1 day/get water from Aztec
Total Population	80,392	

* The Morningstar Water Supply System information is updated as of August 13, 2015, based on conversations with the state of New Mexico and Water System operators.

2.2 Finance Section

Daily Cost Estimates Report

Funding Source	EPA Expended Payroll	EPA Expended Travel	Contract Costs	TOTAL Expended	Estimated Daily Burn Rate
EPA	\$127,170	\$28,750	\$570,000	\$725,920	\$191,180

3. Participating Entities in Region 6

US EPA
USFWS
NMED
ATSDR
NM Department of Health
NM Office of the State Engineer
NM Department of Game and Fish
County of San Juan – New Mexico

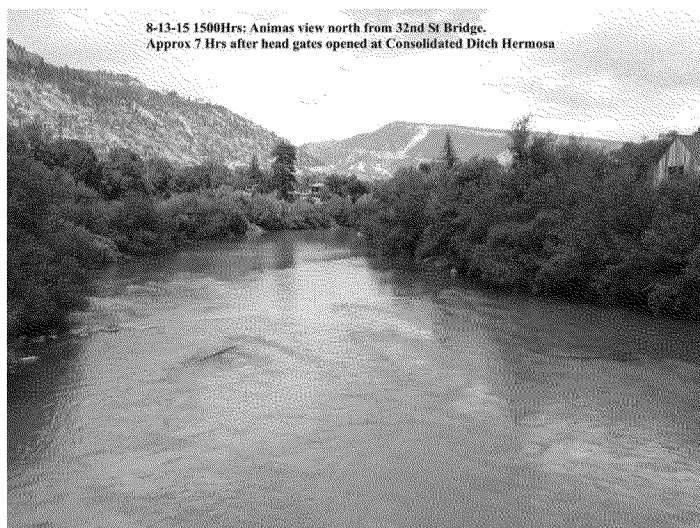
4. Personnel

Group	Number
Region 6 EPA @ REOC	20
Region 6 Contractors @ REOC	4
Region 6 Staff in JIC – Durango, CO	1
Region 6 Staff in Area Command – Durango, CO	1
Region 6 RIC – Farmington, NM	1
Region 6 Logistics – Farmington, NM	1
Region 6 Water Liaison – Santa Fe, NM	1
Region 6 EPA OSC	5
Region 6/7 Water Technicians	12
Region 6 Contractors in Field	33

**U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
2015 Gold King Mine Release SITREP**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 8**



Subject: Situation Report #6
Gold King Mine Release
San Juan County, CO
Latitude: 37.8945 Longitude: -107.6384

From: Durango Unified Command (Situation Unit)

Date: 08/14/2015

Reporting Period: 08/13/2015 through 08/14/2015

Website: epa.gov/goldkingmine

New information from current operational period and projected activities for next operational period are in bold text. Historical information is in plain text.

Executive Summary

On August 5, while investigating the Gold King Mine in Colorado, an EPA cleanup team triggered a release of mine wastewater into Cement Creek. The EPA is working closely with responders and local, state and tribal officials to monitor water contaminated by the release. The release's path flows through three of the EPA's regions - Region 8 (Colorado, Utah, Southern Ute Tribe, and Ute Mountain Ute Tribe); Region 6 (New Mexico), and Region 9 (Navajo Nation). The EPA has activated its Emergency Operations System to ensure coordination among its regions, laboratories and national program offices in Washington, D.C. A Unified Command has been established in Durango CO, which includes the EPA, State of Colorado Office of Emergency Management (OEM), Southern Ute Indian Tribe, La Plata County, and San Juan Basin Health Department. The EPA has established an Area Command in Durango CO, and is coordinating with EPA Regions 8, 6 and 9 as well as officials in Colorado, New Mexico, Utah, the Southern Ute Tribe, the Navajo Nation and the Ute Mountain Ute Tribe

1. Introduction

1.1 Background

Site Number: A8K9RV

Contract Number:

D.O. Number:

Action Memo Date:

Response Authority: CERCLA

Response Type: Emergency

Response Lead: EPA

Incident Category:

NPL Status: not listed

Operable Unit:

Mobilization Date: 08/05/2015

Start Date: 08/05/15

Demob Date: TBD

Completion Date:

CERCLIS ID:

RCRIS ID:

ERNS No.:

State Notification: 08/05/15

The La Plata County Sheriff issued an order closing the Animas River to all watercraft from the north County line (San Juan County, Colorado) to the south County line (at the Colorado/New Mexico State line) until further notice. Furthermore, all such watercraft must be removed from the Animas River within the locations cited above. The decision was made after consultation with the EPA, CDPHE, the San Juan Basin Health Department, and representatives of the Southern Ute Indian Tribe. The order will remain in effect until it is determined that the river is safe. **The Situation Report for tomorrow, Saturday Aug 15, will include a joint press release updating the status of the use of the Animas River.**

1.1.1.1 Incident Category

1.1.2 Site Description

The Gold King Mine near Silverton, Colorado is a historic gold mine at approximately 11,300' elevation. The mine has a continuous discharge of acidic mine drainage that is a significant contributor of manganese, zinc, copper, and cadmium into the Cement Creek drainage of the

Animas River watershed. The Gold King Mine has not had maintenance of the mine workings since 1991, and the workings have been inaccessible since 1995 when the mine portal collapsed.

The EPA Region 8 has been investigating the conditions to assess the on-going releases and incremental de-watering and removal of blockages to prevent blowouts.

1.1.2.1 Location - San Juan County, Colorado, La Plata County, Colorado, Southern Ute Indian Reservation and Ute Mountain Ute Tribe reservation.

1.1.2.2 Description of Threat

Mine waste water was released into Cement Creek and the Animas River. The volume of the release based on US Geological Survey (USGS) Cement Creek gaging station is estimated at three million gallons. The initial environmental concern was the pulse of contaminated water containing sediment and metals discharged in Cement Creek which flows into the Animas River through Durango, Colorado, and into New Mexico where it joins the San Juan River before flowing into Utah. The City of Durango relies on the Animas River as one of its main water sources - the Animas source is off-line. The river is also used for recreational purposes, including fishing and rafting, and is an important cultural resource for the Navajo Nation.

The leading edge of the release passed through Durango, Colorado, on Friday, August 7, 2015, and on August 8, 2015, it crossed the border into New Mexico where it eventually discharged into the San Juan River.

1.1.3 Site Inspection Results

Aerial and ground reconnaissance indicates that the plume associated with the Gold King Mine release has dissipated downstream and there is no leading edge of contamination visible in downstream sections of the San Juan River or Lake Powell.

The EPA is collecting and assessing water quality from Cement Creek and the Animas daily. Water sampling is occurring, and pH levels and dissolved concentrations of metals are being monitored.

1.2 Incident Objectives

- **Continue private water well call tracking, follow up actions and owner communications.**
- **Continue sampling plan and develop strategy to evaluate and mitigate risks due to sediment in the river.**
- **Continue river assessment through sediment and water sampling.**
- **Continue management of adit discharge and develop call down verification (CDPHE).**

- Effectively communicate with public and stakeholders utilizing a multi-faceted communication strategy to dissemination results.
- Ensure health and safety of the public and response management personnel.
- Develop a means to assess the economic impact upon affected communities
- Coordinate with the Colorado Division of water and other stakeholders to assess and flush ditches.
- Provide water of appropriate quality for specified use.
- Continued coordination with the Department of Agriculture (including state and local veterinarians) and the Colorado Extension.
- Maintain stability of mine road to ensure access.
- Prepare for mine dump stabilization.
- Amend field sampling plan to include assessment of remote areas of the canyon, execute when ready.
- Develop a medium term groundwater assessment monitoring transition plan. Develop medium term river monitoring plan to provide notification, warning and understanding to the public on longer term basis.

1.3 Critical Resource Needs

All resources are being tracked by the Resources Unit. Resources for the response continue to be ordered as needed to fill critical resource needs.

1.4 Strategic Considerations

United group of specialist to advise policy makers.

2. Current Activities

2.1 Operations Section

2.1.1 Response Actions to Date

A Colorado Unified Command (UC) post in Durango was established on 8/7/2015 and expanded on 8/10/2015 to full staff levels. An EPA Unified Area Command (AC) was also moved to Durango on 8/10/15. The UC includes EPA, State of Colorado Office of Emergency Management (OEM), Southern Ute Indian Tribe, La Plata County, and San Juan Basin Health Department. The Ute Mountain Ute Tribe and San Juan County CO are also in regular communication with Unified Command. The EPA Regions 6 and 9 have established incident command posts in Farmington, New Mexico that cover New Mexico and the Navajo Nation response areas. A JIC was established 8/7/2015. It is providing support for both the UC and the AC.

The EPA initiated a water quality sampling effort on August 5, 2015, to assess the impacts of the release at the Gold King Mine. There were a total of 5 sampling teams deployed on Monday, 8/10/2015, three from the EPA Region 8 and two from Colorado Department of Health and the Environment (CDPHE). There were four river and 30-40 well water samples collected August 10, 2015. The EPA collected surface water quality samples from seven locations; two of these locations were on Cement Creek, and five of these were on the Animas River in Colorado. Well samples were also collected upon request. These locations were selected based on the

availability of an historical dataset for these locations. These analysis of these samples include pH, dissolved concentrations of metals, and operational milestones. **The CDPHE collected samples from sediment and water from the Animas River north of Durango to south of Durango. The focus was on public assess areas in relation to the ditch flushing.**

On Tuesday, samples from 19 of the 20 planned sediment sampling locations were completed by the EPA (contractor) sampling teams. No additional sediment samples were taken by the EPA on Wednesday 8/12/2015 **or Thursday 8/13/2015.**

Daily residential sampling is occurring.

Residential Well Samples Collected as of 8/13/15: 26 (18 res wells, 1 duplicate, 7 surface water samples)

Total Residential Well Samples as of 8/13/2015: 110 samples (including QA samples)

Sediment Samples Collected 8/13/15: 12 (11 samples, 1 duplicate)

Total Sediment Samples To Date: 33 (including QA samples)

A system to prioritize and track water well sampling is under development.

As of 5:00 pm 08/13/15, the Call Center (970-385-8700) had received 68 additional calls for a total 659 calls. Of the calls received yesterday, 22 were for water well (private or agriculture) and 35 were general. The EPA 800 number has received 14 calls for Colorado.

Bottle water shipments from local suppliers have been occurring daily and distributed as requested.

The Animas Consolidated Irrigation Ditch and Reid Irrigation Ditch fully open and being used for irrigation. A pilot test was conducted on the Animas Consolidated late day on 8/12/2015. The purpose of the test was to visually evaluate sediment transport conditions that would occur upon partially opening the control gate. Ferrous sediments were observed to have been deposited bank to bank in the channel as a result of the mine release. Field measurements of pH were generally over 7 .0 standard units. Conductivity at the downstream sampling location was monitored and dropped over the course of the test as increased flow reached the monitoring point. Dissolved oxygen was indicated to be greater than 7.0 mg/l during the test. **The water quality monitors remain in the ditches and no additional data has been pulled off of the units at this time.**

Non-Potable water distribution as of end of day 8-13- 2015:

Total deliveries: 31 (many are repeat deliveries)

One New delivery only

91020 Gallons

Stakeholders:

Cattle & Horse Farms

Nursery

Fish Hatchery/Fish Ponds
Commercial organic produce farm
Pumping and filtration from river to fill fish ponds.

Potable Water Delivery as of 8-13:

Total Deliveries: 9 (Repeats)

No New Deliveries.

58,200 gallons

Stakeholders:

Single Family Home cisterns.

Multiple family homes on neighborhood cistern.

1120 cases of bottled water have been purchased to hand out to community.

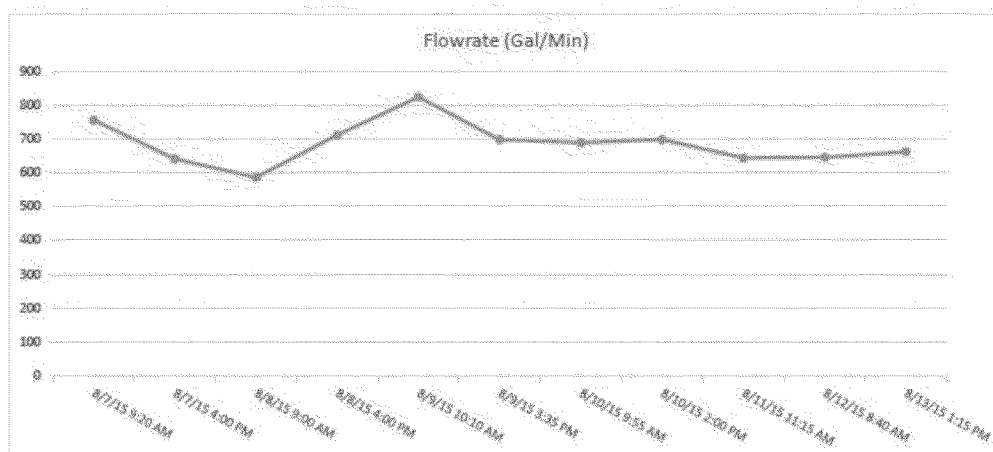
The CDPHE, and public water systems regulated by CDPHE in the impacted area, are taking raw and finished water samples to monitor water quality. CDPHE is coordinating with City of Durango drinking water treatment staff regarding the Animas River intake. It was not in use at the time of the event and has been off-line pending water quality assessment with CDPHE and completion of irrigation canal flushing.

CDPHE has 7 staff in area and continued collecting the Animas River surface water and sediment sampling. Also continued outreach to public water supply system operators.

Public system operators are continuing normal testing of their systems

The EPA continues to operate four treatment and sedimentation ponds at the mine site which are treating water by lowering acidity levels and removing dissolved metals. **A technical expert from CDPHE is assisting at the Gold King Mine site in optimizing the water quality treatment system.**

Flow from the mine through the morning of 8/13/2015 is shown in the following chart. As of 11 am on 8/13/2015, there was no available updated water discharge data available.



Treated water from the last treatment pond is discharging into Cement Creek at levels generally cleaner (higher pH and lower levels of metals) than pre-event, background conditions in the creek. Flow data out of the mine is being collected manually two times per day. Water quality data is being collected at the influent and effluent of the treatment system as well.

Colorado Parks & Wildlife officials monitoring the effects of the spill on terrestrial & aquatic wildlife. To date we have seen no indication of widespread fish mortality in the Animas or San Juan. Fish cages placed directly in the Animas River by the State of Colorado Division of Parks and Wildlife (CDPW) for two days indicate one mortality out of 108 fish tested. CDPW pulled the fish from the Animas on 8/11/2013 and they were preserved for necropsy and toxicity testing (tissue analysis). There was no additional fish mortality after the initial one fish mortality. CDPW is working to collect wild fish. The state of Utah has been sampling along the San Juan River in proximity to Lake Powell.

2.2.1 Anticipated Activities

Sampling of the seven data points on the river will continue. **CDPHE is adding a third sampling team south of Silverton conducting surface water sampling.**

In response to requests from nine residents, one the EPA sampling teams will be working with the Southern Ute trip sampling private drinking water wells.

Durango area operations are conducting more ditch survey work. Irrigation ditches in the southern area of the Animas in Colorado that had minimal staining will be flushing and potentially opening today.

The EPA is working with Bureau of Reclamation (BOR) on taking a sediment sample on 8/14/2015 at the intake to the Animas La Plata Nighthorse Reservoir.

Sampling procedures and a sampling plan are being established and shared with all relevant parties to ensure consistency.

The EPA Region 8 is distributing bottled water to citizens, and both potable and non-potable water for livestock and other agricultural purposes, as needed.

2.2.1.2 Next Steps

2.2.2 Issues

2.3 Logistics Section

Credentialing and badging of UCP personnel started yesterday and is working. The phone application on system did not work with the computer on checking out personnel so manual corrections are being made. The phone app shows updates that the computer is not capturing.

Communications, phone lines and CAT lines have problems have been resolved at the ICP.

2.4 Finance Section - No information at this time

2.4.1 Narrative

2.5 Other Command Staff

2.5.1 Safety Officer

As of Thursday August 14th end of day, there was a single medical related incident. As of this report, the individual has been released from emergency medical care and is in route back to her home office as originally scheduled. As the fatigue and stress continue to rise, please take the time to step back and anticipate, recognize, and evaluate your situation. The most important resource is our people so watch out for yourself and watch out for each other.

2.5.2 Liaison Officer

The Colorado Department of Parks and Wildlife (CDPW) is monitoring effects on wildlife and aquatic life in the affected area.

The UC, other Colorado representatives, officials from the City of Durango and the Mountain States Institute (NGO) are coordinating and discussing parameters for opening the river to recreational use.

2.5.3 Information Officer

The most recent public information statement and press release was issued the afternoon of August 13, 2015. It provided information about the flushing of the ditches.

2.5.4 Weather Forecast

Weather forecast for August 14 and 15, 2015:

DURANGO AREA

Today

Isolated showers and thunderstorms after 3pm. Mostly sunny, with a high near 88. Calm wind becoming west around 5 mph in the afternoon. Chance of precipitation is 10%.

Tonight

Isolated showers and thunderstorms before 7pm. Partly cloudy, with a low around 56. West wind around 5 mph becoming north northeast after midnight. Chance of precipitation is 10%.

Saturday

Isolated showers and thunderstorms after 1pm. Mostly sunny, with a high near 87. North northeast wind 5 to 10 mph becoming west southwest in the afternoon. Chance of precipitation is 20%.

Saturday Night

Isolated showers and thunderstorms before 1am. Partly cloudy, with a low around 56. West northwest wind 5 to 10 mph becoming north northeast after midnight. Chance of precipitation is 20%

SILVERTON AREA

Today

Scattered showers and thunderstorms, mainly after 2pm. Mostly sunny, with a high near 73. Calm wind becoming west around 5 mph in the afternoon. Chance of precipitation is 30%.

Tonight

A 20 percent chance of showers and thunderstorms before 8pm. Partly cloudy, with a low around 42. West wind around 5 mph becoming calm in the evening.

Saturday

Scattered showers and thunderstorms, mainly after noon. Partly sunny, with a high near 71. Calm wind becoming west northwest around 5 mph in the morning. Chance of precipitation is 40%.

Saturday Night

A 20 percent chance of showers and thunderstorms. Mostly cloudy, with a low around 43. West wind around 5 mph becoming calm in the evening.

3. Participating Entities

3.1 Area Command

The EPA Region 8 is coordinating with the EPA Regions 6 and 9, the states of Colorado, New Mexico and Utah, the Southern Ute Tribe and the Ute Mountain Ute Tribe. The EPA Region 6 is working closely with the New Mexico Environment Department (NMED) to evaluate possible impacts in Mexico. The EPA Region 9 is working with the Navajo Nation to evaluate possible impacts to the Tribe. Potentially impacted water systems have been notified, and precautions are in place to ensure drinking water is protected. The EPA and NMED are providing assistance to community water systems and closely monitoring the situation.

The EPA Region 9 has contacted the Bureau of Indian Affairs regarding potential impacts to the Navajo Nation.

3.2 Unified Command and Cooperating Agencies

The UC includes EPA, State of Colorado Office of Emergency Management (OEM), Southern Ute Indian Tribe, La Plata County, San Juan Basin Health Department. The Ute Mountain Ute Tribe will likely join during the next operational period.

The City of Durango and the Ute Mountain Ute Tribe are involved through via their agency representatives. San Juan County is an Agency Administrator.

The EPA Region 8 is coordinating with Agency for Toxic Substances and Disease Registry (ATSDR) in response to public health concerns/questions associated with the mine waste plume. ATSDR has been in communication with local health officials at San Juan County Basin Health Department in Colorado. Public health questions should be directed to Chris Poulet, ATSDR.

4. Personnel On Site

Gold King Mine Release 2015	
	08/13/2015

Group	Number
EPA @ REOC	24
Contractors @ REOC	1
EPA in Field (R8)	26
Contractors in Field (R8)	25
EPA Laboratory	8
Contractors Laboratory	7
USCG	14
ERT	1
Subtotal EPA Region 8 Resources	106
Colorado OEM	3
Southern Ute Tribe	6
La Plata County	15
San Juan County	3
CDPHE	10
Southwest IMT	6
City of Durango	12
Durango Fire	2
San Juan basin Health Dept.	5
Ute Mountain Ute Tribe	1
US Bureau of Reclamation	1
US Bureau of Indian Affairs	1
Grand Junciton Fire	1
Mountain Studies Institute	1
ATSDR	1
Total	181

5. Definition of Terms –

ATSDR= Agency for Toxic Substances and Disease Registry

EPA = United States Environmental Protection Agency

CERCLA = Comprehensive Environmental Responsibility, Compensation and Liability Act

CDPHE = Colorado Department of Public Health and Environment

USGS = United States Geological Survey

UC = Unified Command (Comprised of Southern Ute Indian Tribe, La Plata County, San Juan Basin Health Dept, EPA, State of Colorado OEM)

UCP = Unified Command Post

AC = Area Command (Comprised of EPA Regions 6, 8 and 9)

NMED = New Mexico Environment Department

BIA = Bureau of Indian Affairs

BOR = Bureau of Reclamation

COEM = Colorado Office of Emergency Management

CDPW = Colorado Department of Parks and Wildlife
SWIMT = South West Incident Management Team
MSDS = Material Safety Data Sheet
PPE = Personal Protective Equipment
USCG = United States Coast Guard
ERT = EPA Emergency Response Team
REOC = EPA Regional Emergency Operations Center

6. Additional sources of information – <http://www2.epa.gov/goldkingmine>

U.S. ENVIRONMENTAL PROTECTION AGENCY
 POLLUTION/SITUATION REPORT
 San Juan River Response - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 Region IX**

Subject: POLREP #2
 San Juan River Response

Shiprock, NM
 Latitude: 36.8704828 Longitude: -108.7892506

To:
From: Kathleen Dillon, Situation Unit Leader
Date: 8/14/2015
Reporting Period:

1. Introduction

1.1 Background

Site Number:	Contract Number:
D.O. Number:	Action Memo Date:
Response Authority:	Response Type:
Response Lead:	Incident Category:
NPL Status:	Operable Unit:
Mobilization Date:	Start Date:
Demob Date:	Completion Date:
CERCLIS ID:	RCRIS ID:
ERNS No.:	State Notification:
FPN#:	Reimbursable Account #:

1.1.1 Incident Category

1.1.2 Site Description

The Gold King Mine near Silverton, Colorado is a historic gold mine at approximately 11,300 feet elevation. The mine has a continuous discharge of acidic mine drainage that is a significant contributor of manganese, zinc, copper, and cadmium into the Cement Creek drainage of the Animas River watershed. The Gold King Mine has not had maintenance of the mine workings since 1991, and the workings have been inaccessible since 1995 when the mine portal collapsed.

EPA Region 9 is focused on a stretch of the San Juan River extending from Farmington, NM to Mexican Hat, UT.

1.1.2.1 Location

San Juan County, NM and Navajo Reservation. The Animas River flows into the San Juan River at Farmington, NM. After the Animas River meets the San Juan River, the San Juan River continues to flow west through parts of New Mexico, Colorado, and Utah.

1.1.2.2 Description of Threat

Mine waste water was released into Cement Creek and the Animas River. The volume of the release based on US Geological Survey (USGS) Cement Creek gauging station is estimated at three million gallons. The initial environmental concern was the pulse of contaminated water containing sediment and metals discharged in Cement Creek which flows into the Animas River through Durango, Colorado, and into New Mexico where it joins the San Juan River before flowing into Utah. The river is also used for recreational purposes, including fishing and rafting, and is an important cultural resource for the Navajo Nation.

The leading edge of the release reached the New Mexico border on August 8, 2015 where it eventually discharged into the San Juan River.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Aerial and ground reconnaissance indicates that the plume associated with the Gold King Mine release has dissipated downstream. There is no leading edge of contamination visible in downstream sections of the San Juan River or Lake Powell.

EPA Region 9 is collecting and assessing water quality from the San Juan River from La Plata Highway in New Mexico to Mexican Hat in Utah. Water sampling is occurring, and pH levels and dissolved concentrations of metals are being monitored.

1.2 Incident Objectives

1. Safety
 - Provide safe working environment for all response personnel.
 - Maximize protection of public health and welfare.
 - Identify safety issues and monitor adherence to Health and Safety Plan
2. Sampling
 - Daily water and sediment sampling from 11 designated locations along the San Juan River
3. Water Replacement
 - Procure water trucks and water points to be used for local agriculture and livestock
 - Work with Navajo representatives to staff water points and organize distribution
4. Public Outreach
 - Coordinate public forum at which Navajo tribal leaders and community members can address Incident Command representatives.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Daily operations are focused around gathering water and sediment samples from 11 designated locations in the San Juan River. The Glen Canyon ICP is overseeing sampling in the vicinity of Lake Powell.

Water trucks to address Navajo agricultural and livestock needs have been secured and will be continuing to deliver water to designated locations. The Unified Command has also identified a need on the Navajo reservation to provide feed for livestock.

2.1.2 Response Actions to Date

An Incident Command Post was established in Farmington, NM on 8/9/2015.

Representation at the Command Post includes EPA Region 9, US Coast Guard, Weston, EQM, ERS, and Navajo liaisons.

EPA Region 9 initiated water and sediment sampling efforts on August 9, 2015, to assess the impacts of the release at the Gold King Mine on the San Juan River. Starting on August 9, samples were gathered from the shoreline of following 11 designated locations along the San Juan River:

San Juan River at LaPlata Highway (SJLP)
 PNM Intake (SJFP)
 San Juan River at Hogback (SJHB)
 San Juan River at Shiprock (SJSR)
 San Juan DS from Shiprock (SJDS)
 San Juan River at Four Corners (SJ4C)
 San Juan River at McElmo Creek (SJME)
 San Juan at Montezuma Creek (SJMC)
 San Juan River at Bluff Bridge (SJBB)
 San Juan River at Mexican Hat (SJMh)
 McElmo Creek Tributary (MECT)

On August 13, in addition to gathering shoreline samples, teams performed an assessment to determine locations that could serve as entry/exit points for air boats and other small water craft. Starting today, samples will be taken from points SJLP, SJFP, and SJHB by boat. The other 8 points will be taken as shoreline samples.

Water has begun to be delivered to Navajo Nation for livestock and agriculture. Yesterday, 11,000 gallons of water were delivered to Hal Chita, UT for use for livestock. 7,000 gallons of water was delivered to Shiprock, NM for agricultural use. Today, implementation of irrigation and agricultural systems will continue to be delivered to Navajo Nation. It is anticipated that water will be staged at 11 points throughout Navajo Nation.

Community outreach with Navajo Nation has increased and will continue to be an integral part of ongoing Region 9 operations. EPA representatives will be meeting with three Navajo chapters today including Aneth, Oljeto, and Kayenta. At this point, contact has been established with all 11 Navajo chapters and follow-up will continue with each of these chapters.

A liaison is anticipated to be placed in the Navajo ICP in Shiprock to further the relationship between the EPA and Navajo Nation.

A second ICP was established on August 13 at the National Park Service Glen Canyon Headquarters. The National Park Service is providing EPA Region 9 with office space, logistical support, and housing. The focus of this ICP will be sampling Lake Powell in addition to performing community outreach. Coordination between the EPA, USGS, City of Paige, and Arizona Department of Environmental Quality has been established at this location.

The area between Mexican Hat to the beginning of the San Juan Arm of Lake Powell is difficult to access. Yesterday, START contractors deployed from Page, AZ yesterday to collect water and sediment samples from Clay Hills Crossing, which is about 30 miles downstream from Mexican Hat. The contractors are expected back by mid-day today. After the START contractors return, sampling will be initiated on Lake Powell. The National Park Service will be providing a vessel and an operator to support sampling. Surface water samples will be collected along the main axis of Lake Powell with a focus on collecting sediment and surface water samples from the San Juan Arm of Lake Powell up to the point where the San Juan River enters Lake Powell. Sampling at these locations is expected to run from today through Sunday.

A pre-existing sampling expedition is scheduled to begin August 19 and last 1-2 weeks. The EPA OSC heading efforts out of the Glen Canyon ICP is aiming to have this pre-planned sampling event expanded to include analysis related to the Gold King Mine response.

2.2 Planning Section

2.2.1 Anticipated Activities

Region 9 will be changing Incident Commanders this morning. Bret Moxley will be taking over for Randy Nattis.

Sediment and water sampling of the eleven data points on the San Juan River will continue. Three samples today will be gathered from the middle of the channel via small boat. The other 8 samples will continue to be gathered from the shoreline.

Sampling in the vicinity of Lake Powell will also continue out of the newly established Glen Canyon ICP.

Today, a more robust water distribution system will be established throughout Navajo Nation. Yesterday, one point for water to be used for agriculture and one point for water to be used for livestock were established and 18,000 total gallons were delivered.

Additional representatives from the EPA's community relations have arrived at the Farmington ICP. These members will be meeting with the Aneta, Oljeto, and Reyenta Navajo chapters today. At this point, the EPA has established communication with all 11 Navajo chapters and will be continuing following up with all chapters.

2.2.1.1 Planned Response Activities

Continued daily water and sediment sampling is planned.

Locations for staging of water has been identified within each of the 11 Navajo chapters. This water will be available for use by Navajos for agriculture and livestock.

Community Outreach Branch at Farmington ICP has grown in personnel and will continue outreach with members of Navajo nation. Today meetings are being held with the Aneth, Oljeto, and Kayenta chapters. Tomorrow chapter meetings are anticipated to include Upper Fruit Land, Hogback, Nenahnezad, and San Juan.

2.2.1.2 Next Steps

Potential procurement of additional water craft to be used for sampling from the middle of San Juan River.

Improve relationship with Navajo Nation.

2.2.2 Issues

No current relationship established with Navajo EPA. Establishing this relationship would likely be a great assist to Region 9's response.

2.3 Logistics Section

Process is currently being put in place for requesting and acquiring resources.

One sampling group ran out of some sampling materials yesterday. Shipment from FedEx arrived this morning and sampling team has departed for designated locations with no interruption to sampling plan.

There is a need for a Logistics Chief, Liaison Officer, 2 Documentation Unit Leaders, and 2 Resource Unit Leaders. Resource Requests have been submitted.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

Personal Flotation Devices must be worn by all members of sampling teams while underway on any watercraft. When performing boat operations, a representative from each vessel must contact the Situation Unit Leader at intervals of no more than two hours stating location and current operations. Any lightning sighting will cause a stop to operations.

With weather being forecasted into the mid 90s, hydration is of paramount importance. Additionally, much of the terrain surrounding the river is uneven and rocky. Responders should transit these areas.

While transiting throughout the region, responders should be mindful of the potential for contact with wildlife. Scorpions, snakes, and other similar animals raise a potential for injury.

2.5.2 Liaison Officer

Liaison officer is continuing outreach with community members and representatives of the Navajo Tribe via the following mediums.

Shiprock Chapter Meeting Recap: EPA Staff Randy Nattis, Secody Hubbard, David Yogi, and Dan Heisner participated in a special meeting held at the Shiprock Chapter House from 15:00-19:00. The meeting was attended by approximately 450 residents. Scope of presentation, delivered by Secody and Randy, focused on what EPA R9 were doing to assess contaminants in the river and how we wanted to hear from the community about water needs so we can assist. Randy and Secody were commended by the Shiprock chapter president, and thanked by the area director of BIA, and New Mexico State Assembly Representative Sharon Chilleage for their presentation. National Public Radio, Gallup Independent newspaper attended.

KNDN AM 960 Radio: Randy Nattis delivered remarks in an open mic format over Navajo AM radio KNDN before his presentation before the Shiprock Chapter. Remarks consisted of the content of the presentation delivered to the Shiprock Chapter meeting attendees.

Fact Sheet on Region 9 Response Activities: EPA R9 staff in Region 9 have completed a draft of text to be included in a factsheet encompassing EPA R9's response activities along the San Juan River.

Two Public Presentations Scheduled for Friday: EPA R9 staff will present the status of Region 9 response activities to sample the San Juan River and provide water services at two public meetings on Friday, August 12 at Aneth Chapter and Oljeto Chapter to residents.

A more concrete schedule for meeting with each chapter of Navajo Nation is being established.

2.5.3. Weather Forecast

Weather forecast for Friday, August 14, 2015:

FARMINGTON AREA

Today

A mix of sun and clouds with a high of 95, low of 62 and 20% chance of precipitation. Wind coming out of the East at 9 miles per hour.

Tonight

No chance of precipitation after 7 pm. Partly cloudy, with a low around 62.

Tomorrow

Sunny with a high of 94 and low of 64. 20% Chance of precipitation.

3. Participating Entities

3.1 Area Command

EPA Region 9 is coordinating with EPA Regions 6 and 8, Navajo Nation, and the states of Colorado, New Mexico, Utah, and Arizona. The EPA Region 9 is working with the Navajo Nation to evaluate possible impacts to the Tribe. Potentially impacted water systems have been notified, and precautions are in place to ensure drinking water is protected. The EPA and New Mexico Environmental Department are providing assistance to community water systems and closely monitoring the situation. EPA Region 9 has contacted the Bureau of Indian Affairs regarding potential impacts to the Navajo Nation and is currently working with Navajo liaisons.

3.2 Unified Command and Cooperating Agencies

The UC includes EPA Region 9 and United States Coast Guard. Farmington, NM Incident Commander is changing command this morning. Randy Nattis will be passing command to Bret Moxley.

4. Personnel On Site

EPA - 10
Weston START - 8
Environmental Quality Management - 2
USCG - 7

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report

www.epa.gov/goldkingmine

7. Situational Reference Materials

No information available at this time.